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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,678	09/22/2003	Junichi Yoshizawa	088485-0231	9388

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EXAMINER	
LAM, DUNG LE	
ART UNIT	**PAPER NUMBER**
2617	

DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/667,678	YOSHIZAWA, JUNICHI	
	Examiner	Art Unit	
	Dung Lam	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-5,8-11 and 14-16 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-5,8-11 and 14-16 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims *1-5,8-11 and 14-16* are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kashiwamura** (US Publication No. 2002/0016188) in view of **Croft** (US P No. 6078826).

1. Regarding **claim 1**, **Kashiwamura** teach a power consumption control method comprising:

transmitting audio and/or video content data reproduced by a reproducing apparatus to an output apparatus capable of outputting sound and/or images based on the reproduced audio and/or video content data through a radio communication interface in an ordinary operation mode (paragraph 34); and

transitioning at least one of the reproducing apparatus and the output apparatus from said ordinary operation mode to a low-power consumption operation mode through the radio communication interface, when a data reproduction stop request is made in one or another of the reproducing apparatus or the output apparatus (Paragraph 49 and 50 disclose that when communication is over, the user pushes the "end" button on the

headset which triggers the following events: a) the headset cuts off its transceiver power supply which means radio communication power is lowered, b) the cell phone hangs up which also lowers the phone's communication power consumption, c) and then control data is sent from the headset to the adapter to end the communication mode causing the adapter to return to standby mode and minimizes power consumption.)

However, **Kashiwamura** does not explicitly teach the concept of allowing users to pre-select one of the two low-power modes and the step of transitioning to the pre-selected low power modes; wherein a first mode of low-power status occurs when radio connection is maintained and a second mode of low-power status occurs where radio connection is cut-off. In an analogous art, **Croft** teaches a method of low-power consumption, which allows the users to pre-select which locations the MS is to operate in first deep-sleep mode of operations (Col. 2 L1-20, C3 L1-10). He further teaches a first-low-power-mode (a standby mode, C2 L17-20, Col. 3 L11-19) and a second-low-power mode (a deep-sleep-mode wherein all the circuitry of the mobile phone shutdown except for a timer and the phone may not receive calls which is the same as radio connection is off; see C2-4, especially Col. 3 L11-19) and the transitioning to the selected low-power mode accordingly (C3 L25-50). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to combine **Kashiwamura**'s teaching of the headset with **Croft**'s teaching of two different low-power modes to provide the user more control over which area the MS should be in the first or second low power mode in order to maximize the power conservation according to user preference.

2. Regarding **claim 2**, **Kashiwamura and Croft** teach a power consumption control method according to claim 1, wherein **Kashiwamura** further teaches when the data reproduction stop request is made in the output apparatus, the reproduction apparatus is transitioned to the low-power consumption operation mode through the radio communication interface and the output apparatus is transitioned to the low-power consumption operation mode (paragraph 49 and 50).

3. Regarding **claim 3**, **Kashiwamura and Croft** teach a method according to claim 2, wherein **Kashiwamura** further teaches when a data reproduction request is made in the output apparatus, the output apparatus is recovered from the low-power consumption operation mode to the ordinary operation mode and the reproduction apparatus is recovered from the low-power consumption operation mode to the ordinary operation mode through the radio communication interface (paragraph 46).

4. Regarding **claim 8**, **Kashiwamura and Croft** a method according to claim 7, wherein **Kashiwamura** further teaches when a data reproduction request is made in one of the reproducing apparatus the output apparatus, if the connection of the radio communication has been cut off, the connection of the radio communication is established and said at least the reproduction and the output apparatus is recovered from the low-power consumption operation mode to the ordinary operation mode (paragraph 49 and 50).

5. Regarding **claim 10**, **Kashiwamura and Croft** an output apparatus according to claim 9, wherein **Kashiwamura** further teaches the power control unit transitions the output apparatus to the low-power consumption operation mode, when the data reproduction stop request is made (paragraph 49).

6. Regarding **claim 11**, **Kashiwamura and Croft** an output apparatus according to claim 10, wherein **Kashiwamura** further teaches the power control unit transitions the output apparatus from the low-power consumption operation mode to the ordinary operation mode (paragraph 45), and the reproduction apparatus from the low-power consumption operation mode to the ordinary operation mode (paragraph 46) through the radio communication interface, when a data reproduction request is made.

7. Regarding **claim 4**, **Kashiwamura and Croft** a power consumption control method according to claim 1. Kashiwamura and Croft do not explicitly teach that when the data reproduction stop request is made in the reproduction apparatus, the output apparatus is transitioned to the low-power consumption operation mode through the radio communication interface and the reproduction apparatus is transitioned to the low-power consumption operation mode. Nonetheless, Kashiwamura teaches that when the adapter is detached from the phone, the CPU becomes off-condition (paragraph 37). Kashiwamura also teaches that it is critical to save power in the headsets to increase its standby time (paragraph 7). Therefore, it would have been obvious to a person of

ordinary skill in the art at the time of the invention was made to modify Kashiwamura to also cause the headset to go to a lower power mode upon a data reproduction stop request is made to increase the standby time usage of the limited battery of the headset.

8. Regarding **claim 5**, **Kashiwamura and Croft** a power consumption control method according to claim 4, wherein **Kashiwamura** further teaches when the data reproduction stop request is made in the reproduction apparatus, the reproduction apparatus is recovered from the low-power (stand-by mode) consumption operation mode to the ordinary mode, and the output apparatus is recovered from the low-power consumption operation mode to the ordinary operation mode through the radio communication interface. However, Kashiwamura teaches that when the stop request button is pressed again in the headset toggling the communications to a start mode and thus cause the hook-up condition (paragraph 48). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Kashiwamura to also apply the same concept in the data reproduction apparatus to save power and lengthen the standby time of the data reproduction apparatus.

9. Regarding **claim 9**, **Kashiwamura** teaches an output apparatus (headset 3, Figure 4), comprising: a radio communication interface; an output control unit configured to output sound and/or images in accordance with audio and/or video audio and/or video content data transmitted from a reproduction apparatus through the radio

communication interface (paragraph 34); and a power control unit (71, Figure 6) configured to control at least the reproduction apparatus to transition from an ordinary operation mode in which audio and/or video audio and/or video content data is transmitted to a low-power consumption operation mode through the radio communication interface, when a data reproduction stop request is made at the output apparatus (Paragraph 49 and 50 disclose that when communication is over, the user pushes the end button on the headset which triggers the following events: a) the headset cuts off its transceiver power supply which means radio communication power is lowered, b) the cell phone hangs up which also lowers the phone's communication power consumption, c) and then control data is sent from the headset to the adapter to end the communication mode causing the adapter to return to standby mode and saves its power consumption.)

However, **Kashiwamura** does not explicitly teach that teach that a transition to a low power mode consists of two modes; wherein a first mode of low-power status occurs when radio connection is maintained and a second mode of low-power status occurs where radio connection is cut-off. In an analogous art, **Croft** teaches a method of low power consumption which can have two modes: a first standby mode wherein the receiver wakes up periodically to enable the mobile phone to re-determine its present location which means radio connection is still maintained and a second deep-sleep mode wherein all the circuitry of the mobile phone shutdown except for a timer and the phone may not receive calls which is the same as radio connection is off (col. 2-4, especially Col. 3 L11-19). Therefore, it would have been obvious for one of ordinary

skill in the art at the time of the invention to combine **Kashiwamura**'s teaching of the headset with Croft's teaching of two different low-power modes to maximize the power conservation accordingly with the usage.

10. Regarding **claim 14**, **Kashiwamura and Croft** in Figure 2, a reproduction apparatus, comprising: a radio communication interface (antenna 2e, Figure 2); a reproduction control means for reproducing audio and/or video audio and/or video content data; a transmission control means (control circuit 70, paragraph 62) for transmitting the audio and/or video content data reproduced by the reproduction control unit to an output apparatus through the radio communication interface; a power control means for controlling at least the output apparatus to transition from an ordinary operation mode in which audio and/or video content data is transmitted, to a low-power consumption operation mode (power supply control circuit 71, paragraph 62) through the radio communication interface, when a data reproduction stop request is made (Paragraph 49 and 50 disclose that when communication is over, the user pushes the end button on the headset which triggers the following events: a) the headset cuts off its transceiver power supply which means radio communication power is lowered, b) the cell phone hangs up which also lowers the phone's communication power consumption, c) and then control data is sent from the headset to the adapter to end the communication mode causing the adapter to return to standby mode and saves its power consumption.)

However, **Kashiwamura** does not explicitly teach that teach that a transition to a low power mode consists of two modes; wherein a first mode of low-power status occurs when radio connection is maintained and a second mode of low-power status occurs where radio connection is cut-off. In an analogous art, **Croft** teaches a method of low power consumption which can have two modes: first mode of standby mode wherein the receiver wakes up periodically to enable the mobile phone to re-determine its present location which means radio connection is still maintained and a second mode of deep-sleep mode wherein all the circuitry of the mobile phone shutdown except for a timer and the phone may not receive calls which is the same as radio connection is off (col. 2-4, especially Col. 3 L11-19). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to combine **Kashiwamura**'s teaching of the headset with Croft's teaching of two different low-power modes to maximize the power conservation accordingly with the usage.

11. Regarding **claim 15**, **Kashiwamura and Croft** a reproduction apparatus according to claim 14, wherein the power control unit transitions the reproduction apparatus to the low-power consumption operation mode, when the data reproduction stop request is made (paragraph 49-50).

12. Regarding **claim 16**, **Kashiwamura and Croft** the reproduction apparatus according to claim 15. Kashiwamura further teaches the power control unit transitions the reproduction apparatus from the low-power consumption operation mode to the ordinary operation mode, and the output apparatus from the low-power consumption

operation mode to the ordinary operation mode through the radio communication interface, when a data reproduction request is made (paragraph 46 -47).

Response to Arguments

Applicant's arguments with respect to claims *1-5, 8-11 and 14-16* filed on 9/26/06 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Lam whose telephone number is (571) 272-6497. The examiner can normally be reached on M - F 9 - 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DL

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SUPERVISORY PRIMARY EXAMINER